

National Radio Astronomy Observatory  
Socorro, New Mexico  
VLBA Antenna Memo #82

Brewster, Washington VLBA Maintenance Visit July 12- July 21, 2010.  
Team members consisted of Eric Carlowe, Ramon Gutierrez, Ken Lakies,  
Ray McFarlin, Tommy Montoya and Adrian Zamora. VLBA Site  
Technicians Mark Hofmann and Dave Alderman assisted in all areas of  
antenna maintenance.





FRM was given a thorough inspection and the focus flex shaft was replaced.



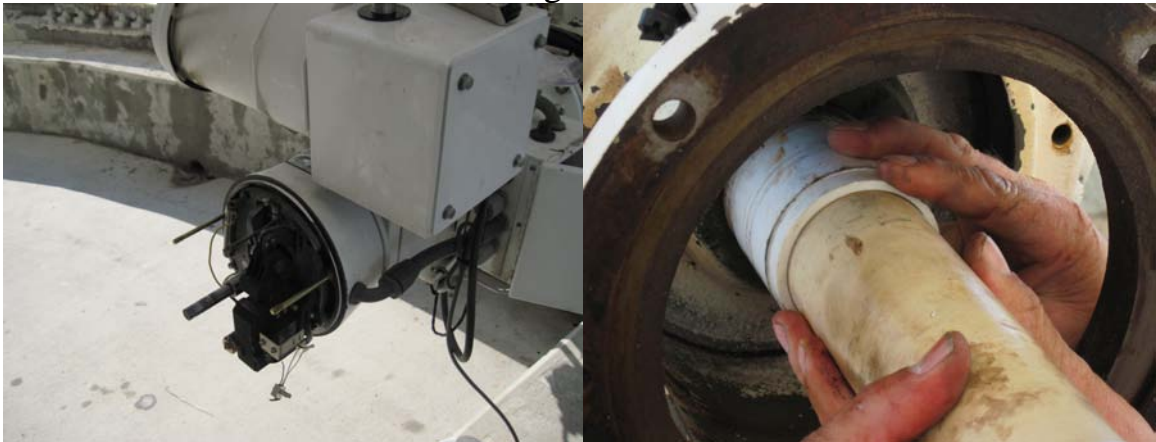
Sub reflector is in good condition.



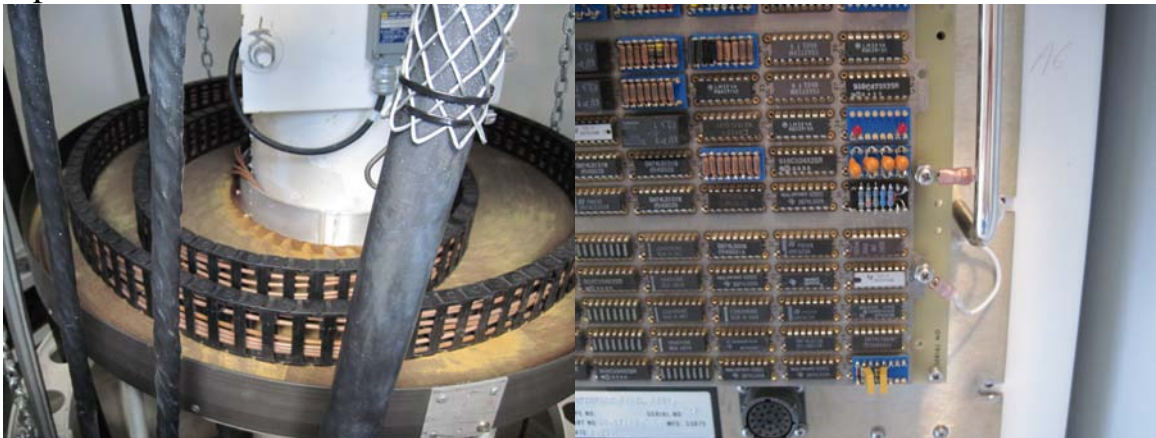
Dish panels are in good condition. The feed cone's elastomeric paint job is holding up well.



The Dichroic reflector is in good condition. The Ellipsoid reflector and actuator were tested and both are in good condition.



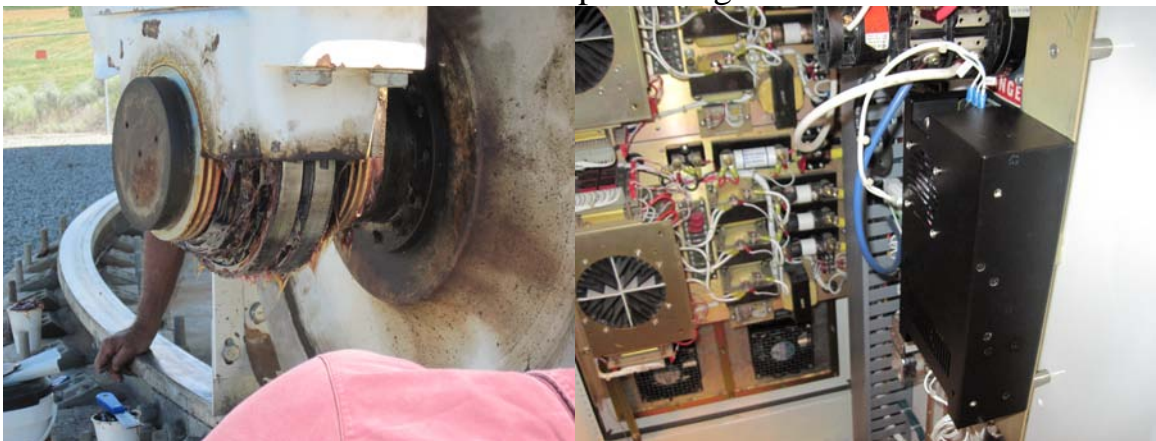
Both AZ# 1 and AZ #2 motor brake switches and gear box seals were replaced.



The new IF cable wrap is holding up very well. The Servo reverse pre-load mod was installed and tested for both AZ and EL.



Both Elevation cable wraps are in good condition.



No azimuth idler wheel bearing needed replacing. The Site Techs had previously installed the new Servo Drive Cabinet power supply.

#### AZIMUTH BEARING GREASE INSPECTION

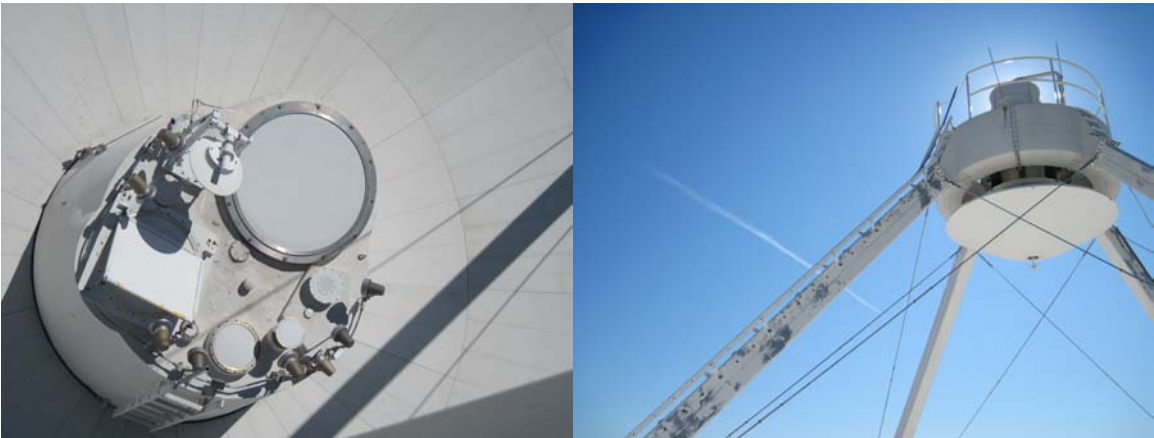
	INNER BEARING	OUTER BEARING
D1	New Wheel.	New Wheel.
D2	New Wheel.	New Wheel.
I1	Good, no metal.	Good, no metal.
I2	Good, no metal.	Good, no metal.
All bearings are very well lubricated.		

#### ELEVATION BEARING GREASE INSPECTION

Encoder	Good grease with no metal flakes.
Synchro	Good grease with no metal flakes.
Both bearings are very well lubricated.	
Pintle bearing is well lubricated with no metal flakes.	



Elevation axle has no visible signs of cracks. Paint is in fair condition.



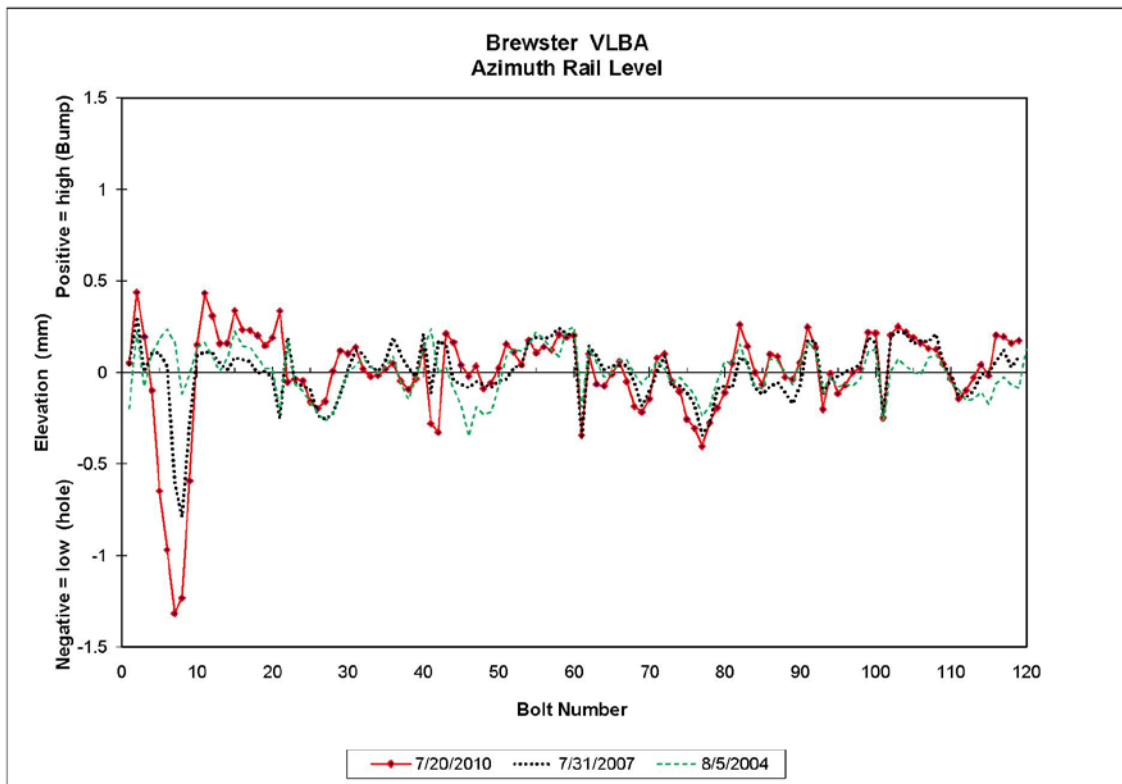
The feed heaters and FE windows are in good condition. Apex and Quad leg paint is in poor condition.



Antenna backup structure is in good condition. Paint is in fair condition.



Rail grout was replaced at bolt numbers 3,4,5,6,7,8,9,10,16,17 and 46, 47.



BR site Rail Elevations.